

Supplementary Table I

Table I. Properties of natural, artificial and synthetic minor-groove binders

| Molecule | MW (Da) | K _d (nM) | Preferred target | Biological effect |
|----------|---------|---------------------|------------------|----------------------------|
| D1 | 37005 | 0.5-1 | SAT III, SAT I | modifier of w^{m4} PEV |
| D1ΔE | 30000 | ND | SAT III, SAT I | suppressor of w^{m4} PEV |
| MATH20 | 83600 | 0.0026 | SAT III, SAT I | suppressor of w^{m4} PEV |
| P9 | 962 | 0.55 | SAT III, SAT I | suppressor of w^{m4} PEV |
| Lex9 | 2717 | 100 | SAT I | ND |
| P31 | 1611 | 0.25 | SAT V | mimicry of GAF mutations |

Apparent binding constants for the different molecules used in this study are from Girard *et al.* (1998) and from Janssen *et al.* (2000a) for MATH20 and synthetic polyamides, respectively. Note that apparent values appear significantly larger (50-250 nM) for binding of P9 or MATH20 to the different dA•dT tracts of SAT III sequences (see Figure 2). The apparent binding constant for D1 was estimated from results of gel shift and DNase I footprinting experiments. Satellite targets are shown in the order in which they are preferentially recognized by each molecule. Biological effects are described in the text. Modification of PEV by D1 depends on both its DNA-binding activity and its C-terminal acidic domain: over-expression of a full length D1 transgene enhances PEV, while over-expression of a D1 transgene carrying a deletion of its C-terminal domain (D1ΔE) suppresses it (Aulner *et al.*, 2002). ND, not determined.

References

- Aulner N, Monod C, Mandicourt G, Jullien D, Cuvier O, Sall A, Janssen S, Laemmli UK, Käse E (2002) The AT-hook protein D1 is essential for *Drosophila melanogaster* development and is implicated in position-effect variegation. *Mol. Cell. Biol.* **22**: 1218-1232
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- Janssen S, Durussel T, Laemmli UK (2000a) Chromatin opening of DNA satellites by targeted sequence-specific drugs. *Mol. Cell* **6**: 999-1011